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EXAMINER

NGUYEN, KHAI MINH

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/697,299	Applicant(s) SARKKINEN ET AL.	
	Examiner KHAI M. NGUYEN	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-36 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 35 and 36 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The language of the claim raises a question as to whether the claim is directed merely to an abstract idea that is not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101.

Claims 35 and 36, claims the non-statutory subject matter of a program. Data structures not claimed as embodied in a computer readable medium are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. See, e.g., Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1754 (claim to a data structure per se held nonstatutory). Therefore, since the claimed programs are not tangibly embodied in a physical medium and encoded on a computer readable medium then the Applicants has not complied with 35 U.S.C 101.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-11 and 13-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukutomi (U.S.Pub-20020091926), in view of Hans, Sebastian, Juergen (WO 01/80525).

Regarding claim 1, Fukutomi teaches a method of linking a service context to a terminal connection in a network controlling device of a data network, said method comprising the steps of:

a) broadcasting a service notification from said data network as a result of a network-initiated creation of said service context (fig.18, [0104]-[0105]);

b) setting up said terminal connection towards said network controlling device in response to a receipt of said service notification (fig.18, [0099], [0104]-[0105]);

e) establishing an association between said service context (item 31) and said terminal (fig.9, items 20 and 21) connection based on a network response to said service indication (fig.18, [0099], [0104]-[0105]).

Fukutomi fails to specifically disclose c) forwarding a service indication via said terminal connection to said data network; d) receiving from a subscriber control element a confirmation of authorized service activation. However, Hans teaches c) forwarding a service indication via said terminal connection to said data network (pg.3, lines 3-11, pg.4, lines 13-27); d) receiving from a subscriber control element a confirmation of

authorized service activation (pg.3, lines 3-11, pg.4, lines 13-27). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Hans to Fukutomi to provide an improved method of providing secure access to resources via a network.

Regarding claim 2, Fukutomi and Hans further teach a method according to claim 1, wherein said service indication is forwarded in a dedicated service indication message (see Hans, pg.3, lines 3-11).

Regarding claim 3, Fukutomi and Hans further teach a method according to claim 1, wherein said service indication is forwarded in a message used for signaling a connection request or connection completion of said terminal connection (see Hans, pg.3, lines 3-11).

Regarding claim 4, Fukutomi and Hans further teach a method according to claim 2, wherein said message is an RRC message (see Fukutomi, fig.6-7, [0063]).

Regarding claim 5, Fukutomi and Hans further teach a method according to claim 1, further comprising the step of forwarding an enhanced message (see Fukutomi, fig.9, [0138]) from said network controlling device to a network node having initiated said service context creation (see Fukutomi, fig.18, [0104]-[0105]), said enhanced message requesting confirmation of authorization of the service of said service context (see Hans, page 1, line 26 to page 3, line 9).

Regarding claim 6, Fukutomi and Hans further teach a method according to claim 1, wherein said network response is an acknowledgement of said confirmation request (see Hans, page 1, line 26 to page 3, line 9).

Regarding claim 7, Fukutomi and Hans further teach a method according to claim 1, wherein said confirmation of authorized service activation is provided by said subscriber control element upon a joining phase for multicast activation (see Hans, page 1, line 26 to page 3, line 9).

Regarding claim 8, Fukutomi and Hans further teach a method according to claim 5, wherein said enhanced message is a RANAP message (see Fukutomi, fig.6-7, [0063]).

Regarding claim 9, Fukutomi and Hans further teach a method according to claim 1, wherein said service indication is forwarded in a direct transfer message (see Fukutomi, fig.6) to a network node having initiated said service context creation (see Fukutomi, fig.18, [0104]-[0105]).

Regarding claim 10, Fukutomi and Hans further teach a method according to claim 5, wherein said network node is an SGSN (see Hans, fig.1).

Regarding claim 11, Fukutomi and Hans further teach a method according to claim 7, wherein said subscriber control element is an SGSN, or a GGSN, or a network element controlled by a service provider (see Hans, fig.1).

Regarding claim 13, Fukutomi and Hans further teach a method according to claim 1, wherein said terminal connection is an RRC connection (see Fukutomi, fig.24-25).

Regarding claim 14, Fukutomi and Hans further teach a method according to claim 1, wherein said service context is a multicast or broadcast multimedia service context (see Fukutomi, abstract).

Regarding claim 15, Fukutomi and Hans further teach a method according to claim 1, wherein said establishing step comprises adding said service indication into an active set of terminal connections (see Fukutomi, abstract) and generating an association between said terminal connection and said service context (see Fukutomi, [0104]-[0105]).

Regarding claim 16, Fukutomi and Hans further teach a method according to claim 1, further comprising the step of releasing said terminal connection if said network response indicates that the service of said service context is not confirmed (see Fukutomi, [0104]-[0105]).

Regarding claim 17, Fukutomi teaches a terminal device (items 20 and 21) for establishing a link between a service context (item 31) of a service provided to said terminal device ([0138]) and a connection for providing said service from a data network to said terminal device (fig.18, [0099], [0104]-[0105]), said terminal device being configured to set up said connection (not specifically disclose) and to forward a service

indication via said connection in response to a service notification received from said data network (fig.18, [0104]-[0105]).

Fukutomi fails to specifically disclose terminal device being configured to set up said connection. However, Hans teaches terminal device being configured to set up said connection (pg.3, lines 3-11, pg.4, lines 13-27). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Hans to Fukutomi to provide an improved method of providing secure access to resources via a network.

Regarding claim 18 is rejected with the same reasons set forth in claim 3.

Regarding claim 19 is rejected with the same reasons set forth in claim 2.

Regarding claim 20 is rejected with the same reasons set forth in claim 4.

Regarding claim 21, Fukutomi and Hans further teach a device according to claim 17, wherein said terminal device forwards said service indication in a direct transfer message (see Fukutomi, [0104]-[0105]).

Regarding claim 22, Fukutomi and Hans further teach a device according to claim 17, wherein said terminal device is a mobile terminal (see Hans, fig.7).

Regarding claim 23, Fukutomi teaches a network controlling device (fig.9) for establishing a link between a service context (item 31) created by a data network and a terminal connection (fig.9, items 20 and 21, [0138]), said network controlling device

being configured to forward to said data network a service indication received via said terminal connection (not specifically disclose), and to establish said link on the basis of a network response received in response to said forwarded service indication (fig.18, [0099], [0104]-[0105]).

Fukutomi fails to specifically disclose network controlling device being configured to forward to said data network a service indication received via said terminal connection. However, Hans teaches network controlling device (item 20) being configured to forward to said data network a service indication received via said terminal connection (pg.3, lines 3-11, pg.4, lines 13-27). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Hans to Fukutomi to provide an improved method of providing secure access to resources via a network.

Regarding claim 24 is rejected with the same reasons set forth in claim 3.

Regarding claim 25 is rejected with the same reasons set forth in claim 4.

Regarding claim 26 is rejected with the same reasons set forth in claim 21.

Regarding claim 27, Fukutomi and Hans further teach a device according to claim 23, wherein said network controlling device forwards said service indication in a RANAP message (see Fukutomi, fig.6-7, [0063]).

Regarding claim 28, Fukutomi and Hans further teach a device according to claim 27, wherein said RANAP message is an Initial UE message (see Fukutomi, fig.6-7, [0063]).

Regarding claim 29 is rejected with the same reasons set forth in claim 15.

Regarding claim 30, Fukutomi and Hans further teach a device according to claim 23, wherein said network controlling device is an RNC (see Hans, fig.1).

Regarding claim 31, a system for establishing a link between a service context (item 31) and a terminal connection (fig.9, items 20 and 21), said system comprising a terminal device for establishing a link between a service context of a service provided to said terminal device ([0138]) and a connection for providing said service from a data network to said terminal device (fig.18, [0099], [0104]-[0105]) said terminal device being configured to set up said connection and to forward a service indication via said connection in response to a service notification received from said data network (not specifically disclose) and a network controlling device for establishing a link between a service context created by a data network (fig.18, [0104]-[0105]) and a terminal connection said network controlling device being configured to forward to said data network a service indication received via said terminal connection (fig.18, [0099], [0104]-[0105]) and to establish said link on the basis of a network response received in response to said forwarded service indication (fig.18, [0099], [0104]-[0105]).

Fukutomi fails to specifically disclose terminal device being configured to set up said connection and to forward a service indication via said connection in response to a

service notification received from said data network. However, Hans teaches terminal device being configured to set up said connection and to forward a service indication via said connection in response to a service notification received from said data network (pg.3, lines 3-11, pg.4, lines 13-27). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Hans to Fukutomi to provide an improved method of providing secure access to resources via a network.

Regarding claim 32 is rejected with the same reasons set forth in claim 4.

Regarding claim 33 is rejected with the same reasons set forth in claim 8.

Regarding claim 34 is rejected with the same reasons set forth in claim 11.

Regarding claim 35, Fukutomi teaches a computer program embodied on a computer readable medium said computer program configured to control a processor to perform:

establishing a link between a service context (item 31) of a service provided to the terminal device (fig.9, items 20 and 21, [0138]);

establishing a connection for providing said service from a data network to the terminal (fig.18, [0099], [0104]-[0105]); and

Fukutomi fails to specifically disclose forwarding a service indication via the connection in response to a service notification received from the data network.

However, Hans teaches forwarding a service indication via the connection in response to a service notification received from the data network (pg.3, lines 3-11, pg.4, lines 13-27). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Hans to Fukutomi to provide an improved method of providing secure access to resources via a network.

Regarding claim 36, Fukutomi teaches a computer program embodied on a computer readable medium said computer program configured to control a processor to perform:

establishing a link between a service context created by a data network and a terminal connection (fig.9, items 20 and 21, [0138]);

forwarding to said data network a service indication received via said terminal connection (fig.18, [0099], [0104]-[0105]); and

Fukutomi fails to specifically disclose establishing the link on a basis of a network response received in response to said forwarded service indication. However, Hans teaches establishing the link on a basis of a network response received in response to said forwarded service indication (pg.3, lines 3-11, pg.4, lines 13-27). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Hans to Fukutomi to provide an improved method of providing secure access to resources via a network.

5. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fukutomi (U.S.Pub-20020091926) in view of Hans, Sebastian, Juergen (WO 01/80525) and further in view of XP-002271691 (ETSI TS 122 146 version 5.2.0 release 5 (Universal Mobile Telecommunications System (UMTS); Multimedia Broadcast/Multicast Service (MBMS))).

Regarding claim 12, Fukutomi and Hans further teach a method according to claim 11,

Fukutomi and Hans fail to specifically disclose wherein said service provider is an external agent who is responsible of producing the multicast/broadcast services. However, XP-002271691 teaches wherein said service provider is an external agent who is responsible of producing the multicast/broadcast services (section 4.2). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of XP-002271691 to Hans and Fukutomi to decrease the amount of data within the network and use resources more efficiently.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHAI M. NGUYEN whose telephone number is (571)272-7923. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent P. Harper can be reached on 571.272.7605. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/VINCENT P. HARPER/
Supervisory Patent Examiner, Art Unit 2617

/Khai M Nguyen/
Examiner, Art Unit 2617

10/10/2008